FACT SHEET

NESHAP FOR SHIPBUILDING AND SHIP REPAIR FACILITIES
(SURFACE COATING)

BACKGROUND

- On July 16, 1992 (57 FR 31576), pursuant to Section 112(c) of the Clean Air Act, "Shipbuilding and Ship Repair (Surface Coating)" was listed as a source category to be regulated under Section 112.

- The affected source is the aggregate of all operations/ activities at a major source shipbuilding or ship repair facility.

- The rule would limit the volatile organic hazardous air pollutants (VOHAP) content of several categories of marine coatings and specify work practices that minimize evaporative emissions and spills from the handling, transfer, and storage of organic thinning solvent and paint wastes.

- Compliance with the hazardous air pollutants (HAP) rule would be determined using the volatile organic compounds (VOC) content of the coating as a surrogate for the VOHAP content (compliance options 1-3). However, a certification procedure or a test method developed to measure the VOHAP content of marine coatings may be approved by the Administrator (compliance option 4).

- There are from 437 to 600 (Marine Log) listed shipyards in the United States marine log. An estimated 35 of these shipyards are major sources of HAP.

- No new major source shipyards are expected to be built within the next 5 years.

FINAL STANDARDS

- For coating operations at new and existing affected sources, the promulgated NESHAP is based on the use of lower-VOC coatings that meet the 1992 California VOC limits for marine coatings. All new and existing major source shipyards would be required to use coatings that meet the limits in Table 1.

TABLE 1. VOLATILE ORGANIC HAP (VOHAP) LIMITS FOR MARINE COATINGS

Coating Category	VOHAP limits[a,b,c]		
	grams/liter coating (minus water and exempt compounds)	grams/liter solids[d]	
		t > 4.5°C	t < 4.5°C[e]
General use	340	571	728
Specialty	--	--	--
Air flask	340	571	728
Antenna	530	1,439	--
Antifoulant	400	765	971
Heat resistant	420	841	1,069
High-gloss	420	841	1,069
High-temperature	500	1,237	1,597
Inorganic zinc high-build	340	571	728
Military exterior	340	571	728
Mist	610	2,235	--
Navigational aids	550	1,597	--
Nonskid	340	571	728
Nuclear	420	841	1,069
Organic zinc	360	630	802
Pretreatment wash primer	780	11,095	--
Repair and maint. of thermoplastics	550	1,597	--
Rubber camouflage	340	571	728
Sealant for thermal spray aluminum	610	2,235	--
Special marking	490	1,178	--
Specialty interior	340	571	728
Tack coat	610	2,235	--
Undersea weapons systems	340	571	728
Weld-through precon. primer	650	2,885	--

[a]The limits are expressed in two sets of equivalent units. Either set of limits may be used for the compliance procedure described in §63.785(c)(1), but only the limits expressed in units of g/L solids (nonvolatiles) shall be used for the compliance procedures described §63.785(c)(2)-(4).

[b]VOC (including exempt compounds listed as HAP) shall be used as a surrogate for VOHAP for those compliance procedures described in §63.785(c)(1)-(3).

[c]To convert from g/L to lbs/gal, multiply by (3.785 L/gal)(1/453.6 lbs/g) or 1/120. For compliance purposes, metric units define the standards.

[d]VOHAP limits expressed in units of mass of VOHAP per volume of solids were derived from the VOHAP limits expressed in units of mass of VOHAP per volume of coating assuming the coatings contain no water or exempt compounds and that the volumes of all components within a coating are additive.

[e]These limits apply during cold-weather time periods, as defined in §63.782. Cold-weather allowances are not given to coatings in categories that permit over a 40 percent VOHAP content by volume. Such coatings are subject to the same limits regardless of weather conditions.

- All new and existing major source shipyards are required to handle and transfer thinning solvent and paint wastes in a manner that minimizes spills. In addition, containers of solvent or paint wastes that hold any organic HAP must have no visible leaks and must be normally closed unless materials are being added to or removed from them.

COMPLIANCE PROCEDURES

- Affected sources would choose from the following procedures to determine compliance with the coating limits:

  -- Option 1: No thinning solvent added. Certify that the VOC content of the coating, as applied, is the same as the VOC content of the compliant coating, as received.

  -- Option 2: Thinning solvent added -- coating-by-coating compliance: Compare the actual volume of thinning solvent used to the maximum allowable volume on a coating-by-coating basis over each calendar month (based on volume solids (nonvolatiles) calculations to determine maximum allowable thinning ratios).

  -- Option 3: Thinning solvent added -- group compliance: Compare the actual volume of given thinning solvent used for all coatings to which that solvent is added to the maximum allowable volume for the same group of coatings over each calendar month (based on volume solids calculations to determine maximum allowable thinning ratios).

  -- Option 4: Certify that the VOHAP content, as measured by an Administrator-approved test method, of each coating or group of coatings, as applied, is less than or equal to the applicable VOHAP limit (based on volume solids).

- Compliance with the handling, transfer, and storage standard would be evaluated against the source-specific work practices proposed by the source in its implementation plan and approved by the Administrator.

NOTIFICATION/RECORDKEEPING/REPORTING REQUIREMENTS

- Initial notification is required by the part 63 General Provisions. In addition to the information required in the General Provisions, sources would be required to submit for the Administrator's approval the compliance and recordkeeping procedures they intend to use for the coating operations and the work practice measures they intend to implement to minimize evaporative emissions from the handling, transfer, and storage of thinning solvent and paint wastes. Sources would be required to submit an initial notification 180 days after the effective date of the standard.

- Sources are required to maintain for 5 years all records necessary to demonstrate compliance with the standards. Records include any Method 24 tests, VOC (or VOHAP) content certifications, calculations of allowable thinning solvent usage, and actual paint and thinning solvent usage by month.

- Sources must submit reports demonstrating compliance, or in the case of noncompliance, reports demonstrating the extent and cause(s) of violation. Reports will contain much but not all of the information kept in a facility's records and shall be submitted every 6 months following the compliance date.

IMPACTS (nationwide incremental impacts)

- Organic HAP emissions: reduction in HAP emissions of 24 percent or 318 Megagrams per year (350 tons per year) from affected sources.

- Energy/water/solid waste/noise: no negative impacts.

- Costs: increase in annualized cost of approximately $2.0 million per year; insignificant increase in capital costs.

CONTROL TECHNIQUES GUIDELINES (CTG)

- Section 183(b)(4) of the Clean Air Act requires a CTG recommending controls for VOC and particulate emissions from shipbuilding and ship repair facilities. A Federal Register notice announcing the CTG is also being issued.

- Applicability must be determined by the States based on ozone nonattainment status of the area and the source's annual VOC emissions.